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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,753	01/23/2002	Chao-Fu Shu		3241

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04/09/2003

EXAMINER

WAKS, JOSEPH

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,753

Applicant(s)

SHU, CHAO-FU

Examiner

Joseph Waks

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "5 and 105" has been used to designate both for a float and a floating cylinder. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "14 and 114" and "15 and 115" have both been used to designate float and "21" designated for both a support body and another support body. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the linking rod must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In line 1, "disclosed" is a phrase that can be implied.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. **Claims 1-6** are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The description and the drawings are unclear with respect to the recited linking rod. Since the support body 21 looks in the drawings like a single element and claim 1 recites a single support body the function of the sketchy shown linking rod is unclear.

8. **Claims 1-6** are also rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

For the reasons indicated above one skilled in the art would not be able to make and/or use the invention.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 1-6** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 4-5, "the seabed" and line 5, "the middle section" lack antecedent basis, line 6 "a liking rod" and lines 12-13, "the support boy" do not make sense, line 7, "mechanism" should be --mechanisms--, line 9, "vertical paddle" should be --a vertical paddle--, line 11, "the mechanism" lacks antecedent basis since it is not clear if it addresses the rotating mechanism or one of the plurality of conversion mechanisms, lines 14-15, 'a transmission mechanism is provided to the float and the floating cylinder is at the sea level" does not make sense, line 16, "high pressure energy" is vague and indefinite, and line 18, "air delivery tube" should be --an air delivery tube--.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 1-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Porter (US 3,988,592)** in view of **Brammeier (US 5,495,128)** and **Eberle (US 4,206, 601)**.

Porter discloses a conversion device having an upper layer 14, being a wind energy conversion means mounted on the support body and a lower layer 11, 16, 18 being a wave energy conversion means wherein both means are supported by a support body 17,19 having one end mounted into the seabed 22, a middle section connected to other support bodies by a linkage 21, the rotating mechanism accesses wind energy by vertical rotating paddle to drive a transmission shaft to obtain power, the wave energy conversion means includes independent conversion mechanisms 38, 39, 50, 64, 66 and the conversion mechanism is a combination of a support body 17, 19, a float 11 and a floating cylinder 18 or 16, the surrounding of the support body is connected to floats 11 and 16 and a transmission mechanist 56, 57 provided to the float and the floating cylinder 18 to produce high pressure air. However, **Porter** does not disclose the wind conversion means including three equally distributed, independent, rotating mechanisms, the wave energy conversion means including 4 independent conversion mechanisms, the one end of the floating cylinder connected to a teeth strap, and the high pressure air energy being transmitted to the coast via air delivery tube.

Brammeier discloses a wind conversion means including three equally distributed, independent, rotating mechanisms 12, 14 for the purpose of maximizing the efficient utilization of available wind current.

Eberle discloses a conversion device 100 including a including the floating cylinder 400, 402, 404 connected to a teeth strap 608, 610 a high pressure air transmitted to the coast via air delivery tube 706 for the purpose of transmitting the linear motion of the float to rotate the compressor 630 and utilizing the compressed air energy at the onshore power consumption site.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the conversion device as taught by **Porter** and to provide the wind conversion means including the three equally distributed, independent, rotating mechanisms as taught by **Brammeier** for the purpose of maximizing the efficient utilization of available wind current.

It would have been further an obvious matter of design choice to provide the combined wind conversion means with 4 independent conversion mechanisms for the purpose of utilizing the available wave energy at a particular location, since applicant has not disclosed that the 4 independent conversion mechanisms solves any stated problem or are for any particular purpose and it appears that the invention would perform equally well with any suitable number of wave energy conversion mechanism.

It would have been furthermore obvious to one having ordinary skill in the art at the time the invention was made to design the combined conversion device and to provide the floating cylinder connected to a teeth strap and to transmit the high pressure air energy to the coast via air delivery tube as taught by **Eberle** for the purpose of transmitting the linear motion of the float to rotate the compressor and utilizing the compressed air energy at the onshore power consumption site.

Prior Art


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Communication

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703) 308-1676. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.


JOSEPH WAKS
PRIMARY PATENT EXAMINER
TC-2800

JW
April 5, 2003